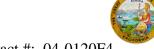
#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

## WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-029913 Address: 333 Burma Road **Date Inspected:** 07-Aug-2013

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure Prime Contractor: American Bridge/Fluor Enterprises, a JV **OSM Departure Time:** 1730 Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

Jesse Cayabyab and Bernie Docen@WI Present: **CWI Name:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No

N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** 

**Delayed / Cancelled:** Yes No N/A 34-0006 **Bridge No: Component:** SAS OBG and Tower

### **Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At the Tower Base Electro Slag Welding (ESW) G joint S-045 face B location Y=9400mm, QA randomly observed the ABF welder Wai Kit Lai continuing to perform 3G SMAW welding repair on the Ultrasonic Testing (UT) detected reject on the vertical weld of the ESW. The repair excavation is being welded per the approved Request for Weld Repair RWR#201307-005. The welder was observed welding in the 3G (vertical) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode as per the welding procedure ABF-WPS-D15-1000-R03 Repair. The repair excavation and the adjacent base metal was preheated to more than 350°F using Miller Proheat 35 Induction Heating System prior to and during the welding. During this shift, ABF QC Jesse Cayabyab was noted monitoring the workmanship and welding parameters. The measured welding parameters during welding was recorded as 130 amperes on a 1/8" diameter E7018H4R electrode. At the end of the shift, 3G repair welding was still continuing and should remain tomorrow.

At the Tower Base Electro Slag Welding (ESW) Q joint E-043 location Y=5770mm, QA randomly observed the ABF welder Donald Plum perform the flush grinding on the completed weld repair at the mentioned weld joint. The welded repair is being flush ground in preparation for the Magnetic Particle testing (MT) and Ultrasonic Testing (UT). Flush grinding of the weld repair was completed during the shift.

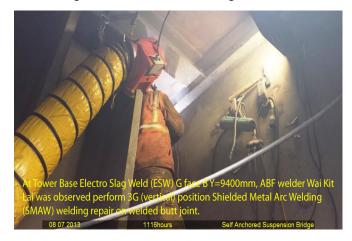
At the Tower Base Electro Slag Welding (ESW) V joint W-043 location Y=6200mm to Y=7000mm, this QA

N/A

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

performed 100% MT verification on the welded repair ESW butt joint. This QA utilized the Parker Contour Probe Model DA 400 with serial number 18033 electromagnetic yoke with red magnetic powder as a test media. QA found no significant indications during the verification. Please see TL-6028 report for more information.



## **Summary of Conversations:**

No significant conversation occurred today.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas 916-764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
Reviewed By:	Reyes, Danny	QA Reviewer